

Crowdsourcing CPU Vision Reading Assignment 3

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1) What are the demographics of crowd workers?

Ans. The important demographics of crowd workers are Age, Gender and Education Level. The paper "Demographics of Mechanical Turk" by "Panos Ipeirotis Department of Information, Operation, and Management Sciences Leonard N. Stern School of Business New York University", discusses various other demographics that are mentioned below:

- Gender – The survey result suggest that most of the crowd workers from US are females while majority of workers participating from India are males.
- Age – The results for age distribution amongst the crowd workers suggest that majority of crowd workers are the younger population having average age of around 26-28 years.
- Educational Level – Since majority of crowd workers are younger generation people, they have higher education level.
- Household Income Level – The income levels of the people working as crowd workers generally belong to low income category. Workers in India have much less income level as compared to crowd workers in USA.
- Marital Status, Children and Household Size : Majority of crowd workers are younger people having marital status as single. For the household size, people in India have more household size as compared to USA. (Ipeirotis,2010,p.3) (Ipeirotis,2010,p.4) (Ipeirotis,2010,p.5) (Ipeirotis,2010,p.6)

The paper "Worker Demographics and Earnings on Amazon Mechanical Turk: An Exploratory Analysis" (Hara, 2019,p.3) (Hara, 2019,p.4) discusses following basic crowd demographics:

- Country of Residence – This is one of the major demographic of any crowd worker, since the crowd sourcing platform is open to all the people across the globe.
- Disability and Health Condition – The paper mentions that since the crowd sourcing tasks are available online, people who might have some kind of disability will find it beneficial to work upon as it gives them the flexibility to complete the tasks by working from home and earn money simultaneously.

2) What motivates people to work as crowd workers?

Ans. In the paper "Demographics of Mechanical Turk" by "Panos Ipeirotis Department of Information, Operation, and Management Sciences Leonard N. Stern School of Business New York University", the author describes the results of a survey that was mainly conducted to understand the demographics of crowd workers in any crowdsourcing platform along with their motivation to work as a crowd worker. As per the results of survey, people residing in different parts of world have very varied motivation to work as crowd worker. For instance, most of the people from U.S participate in crowd sourcing just to spend their free time and earn some money, but on the other hand very few people from India have the same kind of motivation. One of the major motivation for people to work as crowd worker is money, as per the

result statistics more Indians consider the income from crowdsourcing as their primary source of income as compared to USA. (Iperiotis,2010,p.10)

Apart from getting paid, people do have following motivation to work as crowd worker:

- Using the money earned from crowdsourcing platform as their secondary source of income to enjoy their hobbies and buy new gadgets.
- Most of the unemployed people look this as an opportunity to earn some income and are motivated to work as crowd worker to afford living..
- Some people do participate in crowd sourcing task to spend their free time in a more fruitful way by earning money.
- Large portion of crowd workers are young population, who feel the HIT's are a good source of entertainment and fun, so they take it as motivation and work on tasks.
(Iperiotis,2010,p.11) . (Iperiotis,2010,p.12)(Iperiotis,2010,p.13)

3) List at least three crowdsourcing platforms that people can choose from when deciding to work as crowd workers.

Ans. The different crowdsourcing platforms that are available for crowd workers are listed below:

1. Click Worker
2. Cloud Factory
3. CrowdComputing Systems
4. CrowdFlower
5. CrowdSource
6. MobileWorks
7. oDesk
8. Amazon Mechanical Turk (Vakharia,2015,p.12) (Vakharia,2015,p.13) (Vakharia,2015,p.14)
(Vakharia,2015,p.15)

4) What are the quality control techniques used to collect high quality annotations from crowd workers?

Ans. The paper "*Beyond Mechanical Turk: An Analysis of Paid Crowd Work Platforms*" by "Donana Vakharia and Matthew Lease", discusses various quality assurance and control techniques that are used by different crowd sourcing platform to ensure high quality annotations from crowd workers.

- Some of the important ways to ensure quality are giving specialized training to workers before they start working on any HIT.
- Conducting frequent gold test, monitoring the time taken by crowd workers to complete an assigned task along with monitoring the keystrokes are useful ways to ensure quality control.
- Providing immediate feedback to crowd workers if they fail the gold tests is also useful technique to ensure high quality annotations, as it helps worker to improve and get better on their tasks.

- For tasks that include content writing, quality control is ensured by having the editors review the content and double check if the writing adheres to the grammar rules and style guide.
- To make sure the workers have high accuracy for the annotation tasks, *majority agreement* is used and a threshold is set up, if the accuracy is less than the threshold value, the workers are reassigned the task.
- Enterprise level offerings, API documentations and support along with specialized tasks are used for quality assurance.
- The “*Clickworker*” – a crowdsourcing platform uses the following quality control techniques: random spot testing by platform personnel, gold checks, worker agreement checks along with plagiarism check and proof reading.(Vakharia,2015,p.12) (Vakharia,2015,p.13) (Vakharia,2015,p.14)(Vakharia,2015,p.15)

5) Submit one "discussion point" in total (not per paper). This can be in the form of a question, critique, connection to other readings, or plausible future work that you think is interesting to investigate in greater detail in class. The discussion point may be about one paper or can compare and contrast different papers you chose to read.

Ans. The paper “*Beyond Mechanical Turk: An Analysis of Paid Crowd Work Platforms*” by “*Donana Vakharia and Matthew Lease*”, mentions that crowd sourcing platforms offers: “Self-service, Enterprise, and API offerings” with the help of restful API’s. The crowd sourcing platform **oDesk** mentions that it uses the following API’s– “Job Search API, Time Reports API, Message Center API, Financial, Reporting API, Custom Payments API “ I want to know about the tasks in which such API’s are used and how crowd workers who don’t have knowledge of API’s can help accomplish that HIT.